"43-045.00070 ok Kab



Bruce augustive Monroe Energy, LLC

Trainer, PA 19061 (610) 364-8000

January 27, 2015

FEB 0 2 2015 3AP20

FedEx: 7725 6903 8053

Mr. James Rebarchak Commonwealth of Pennsylvania Department of Environmental Protection Southeast Regional Office 2 East Main Street Norristown, PA 19401

Re: Monroe Energy, LLC - Trainer Refinery

40 CFR 63, Subpart UUU: Semi-Annual Periodic Report

40 CFR 60, NSPS J: Semi-Annual Report

Reporting Period: July 1, 2014 – December 31, 2014

Dear Mr. Rebarchak:

In accordance with 40 CFR 63 Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units and Sulfur Recovery Plants, Monroe Energy, LLC's Trainer Refinery hereby submits this semi-annual compliance report (per §63.1575(b)(2)) for the period beginning July 1, 2014 and ending December 31, 2014. This report is also being submitted in compliance with 40 CFR 60.107(d), (e) and (f) and 40 CFR 60.7 (c) for the continuous monitoring systems required by the New Source Performance Standards (NSPS) for the North Side and South Side refinery fuel gas systems that are continuously monitored for H2S, Sulfur Recovery Unit (SRU) for SO2, and the Fluid Catalytic Cracking Unit (FCCU) for PM, CO, and SO₂.

Please note that the Refinery's Main Flare and Sour Gas Flare accepted NSPS J applicability on July 1, 2013, pursuant to the Refinery's Consent Decree (Civil Action H-05-0258). On October 1, 2013, the Refinery submitted data to the Pennsylvania Department of Environmental Protection (PADEP) certifying the performance of the H₂S CEMS associated with these flares.

Based upon information and belief formed after a reasonable inquiry, I, as a responsible official of the above-mentioned facility, certify the information contained in this report is accurate and true to the best of my knowledge.

Should you have any questions or comments regarding this report, please contact Mr. Matt Torell, Environmental Leader, at (610) 364-8399.

Sincerely,

MONROE FRENCY, LLC

Jeffrey K. Warmann CEO & President

Enclosure

cc: Matt Torell (Monroe)

FedEx: 7725 6919 9242
U.S. EPA, Region III
Director, Air Protection Division
Mail Code 3AP20
1650 Arch Street
Philadelphia, Pa 19103-2029

MONROE ENERGY, LLC TRAINER REFINERY

SEMIANNUAL PERIODIC REPORT Reporting Period: July 1, 2014 – December 31, 2014

The Refinery MACT 2 emission standards (40 CFR 63 Subpart UUU - National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units and Sulfur Recovery Plants) regulate the following refinery affected sources:

- Fluidized Catalytic Cracking Unit (FCCU Source ID 101)
- 2. Catalytic Reforming Unit (Platformer Unit Source ID 119)
- 3. Sulfur Recovery Unit (SRU Source ID 102)
- 4. Each Bypass line serving the above units that could divert an affected vent stream away from a control device used to comply with the requirements of this subpart.

This semi-annual report for the period beginning July 1, 2014 and ending December 31, 2014 addresses the status of facility compliance with Subpart UUU.

COMPLIANCE STATUS: 40 CFR 63 SUBPART UUU

1. FCCU: [§63. 1564-1565]

The refinery operates one FCCU. On November 22, 2005 the facility received approval from U.S. EPA for an Alternative Monitoring Plan (AMP) in lieu of the requirement to install and operate a Continuous Opacity Monitoring (COM) System on the FCCU wet gas scrubber (WGS) stack. The AMP requires the refinery to monitor WGS liquid-to-gas ratio to continuously demonstrate compliance with the limits established during performance testing conducted in 2006 and 2007.

The average liquid-to-gas ratio was calculated for each operating hour during the period from July 1 to December 31, 2014. The L-to-G ratio was above the minimum ratio of 0.08 gal/scf established during the 2007 performance test (i.e., there were no deviations during the reporting period).

For the reporting period (July 1 to December 31, 2014), the FCCU was in compliance with the Refinery MACT 2.

As required under §63.1575(d) and (e), the following information is provided for the FCCU for the period July 1, 2014 to December 31, 2014:

- (d)(1) The total operating time of each affected source during the reporting period: <u>The FCCU operated 4,296 hours out of the possible 4,416 hours for the period.</u>
- (d)(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken: There were no reportable events that occurred during the reporting period.
- (d)(3) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks): <u>See attached Table 1.</u>
- (e)(1) The date and time that each malfunction started and stopped: There were no reportable events that occurred during this reporting period.
- (e)(2) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks: See attached Table 1.
- (e)(3) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in §63.8(c)(8): See attached Table 1 and Attachment A.
- (e)(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period: There were no reportable events that occurred during this reporting period.
- (e)(5) A summary of the total duration of the deviation during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging period specified in the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period: There were no reportable events during this reporting period.
- (e)(6) A breakdown of the total duration of the deviations during the reporting period and into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes:
 - Startup, shutdown: 0 hours
 - Control equipment problems: 0 hours
 - Process problems: 0 hours
 - Other known causes: 0 hours
 - Other unknown causes: 0 hours
- (e)(7) A summary of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting

period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system as a percent of the total source operating time during that reporting period: See attached Table 1.

- (e)(8) A breakdown of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes: See attached Table 1.
- (e)(9) An identification of each HAP that was monitored at the affected source: <u>CO is monitored as a surrogate for organic HAPs.</u>
- (e)(10) A brief description of the process units:

The Fluidized Catalytic Cracking Unit (FCCU) is a refinery process unit used for the production of gasoline. Heavy oil, which is used as the feedstock, is catalytically cracked in a fluidized catalyst bed to produce C3 olefins, C4 olefins and isobutanes. In the cracking reactor, heavy carbonaceous materials (coke) become deposited on the catalyst, requiring continuous regeneration. The catalyst is circulated to a fluidized bed regenerator where these deposits are combusted. Most of the catalyst particles entrained in the regenerator flue gas are then removed in two stages of cyclones within the regenerator vessel and then are returned to the fluidized bed reactor.

At the Trainer Refinery, the FCCU control devices include a CO Boiler for CO reduction, an Enhanced Selective Non-Catalytic Reduction (eSNCR) unit for NO_x reduction, an electrostatic precipitator for PM reduction and a wet gas scrubber for PM and SO_2 reduction.

- (e)(11) The monitoring equipment manufacturer(s) and model number(s): $\underline{SO_2}$ Analyzer Ametek Process Instruments, Model 921 Single Gas Analyzer; NOx Analyzer Ametek Process Instruments, Model 922 Single Gas Analyzer; CO and $\underline{O_2}$ Analyzer Servomex Company Inc., Model 4900 Analyzer.
- (e)(12) The date of the latest certification or audit for the continuous gas analysis system or continuous emission monitoring system: <u>Annual RATA conducted on the SO2 and O2 monitors July 17, 2014</u>.
- (e)(13) A description of any change in the continuous emission monitoring system or continuous opacity monitoring system, processes, or controls since the last reporting period: Not Applicable.

2. Platformer Unit [§63.1566-1567]

The refinery operates one Catalytic Reforming Unit. As required by Subpart UUU, the refinery collects catalyst samples at the inlet and outlet of the Chlorsorb unit in accordance with their operations, maintenance and monitoring plan. The facility's operating permit requires that the weekly average chloride concentration of the samples at the inlet be less than 1.35% by weight and at the outlet be less than 1.80%. During this reporting period, one deviation was noted. A sample of the inlet catalyst was not analyzed on July 6, 2014.

Also, as part of the Subpart UUU requirements, the refinery is required to monitor the vent gas temperature at the inlet to the Chlorsorb unit and demonstrate that the daily average temperature has not exceeded the maximum temperature demonstrated during the 2006 performance test. For the period July 1, 2014 to December 31, 2014, the Platformer vent gas to the Chlorsorb unit was monitored continuously and the daily average temperature during the reporting period did not exceed the maximum allowable inlet temperature of 350 deg. F when the Platformer Regenerator was operating.

3. SRU [§63.1568]

The refinery operates two Sulfur Recovery Units. The required SO_2 and O_2 Continuous Emissions Monitoring System (CEMS) were installed in April 2005 and have been in operation since installation.

As required under §63.1575(d) and (e), information must be provided for any deviation of the emission limitation for the SRU: <u>During this reporting period there were no deviations reported; therefore, no additional information is provided.</u>

4. Bypass Lines [§63.1569]

The FCCU does not have any bypass lines. The Platformer Chlorsorb Unit was not bypassed during this reporting period. The Sulfur Recovery Unit was not bypassed during this reporting period.

5. Start-up, Shutdown, and Malfunction Plans (SSMP) [§63.10(d)(5)]

Any startup, shutdown, and malfunction at the Facility which occurred during the reporting period were managed consistent with the facility's SSMP. A record of the malfunction events and copies of the event notification letters, if any, to PADEP are provided in Attachment A. There were no events or notification letters for this reporting period.



Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source: Parameter: SRUSTACK

SO2PPMC

Operating Hours:

4,416.00

terval:	001H	End	Duration	Reason Code - Description
	Start	End Date/Time	(hours)	Action Code - Description
cident ID	Date/Time	Date/Time 07/18/2014 08:59	1.00	08 - NORMAL OPERATION
	07/18/2014 08:00	0.74.74.65.65.65.65.65.65.65.65.65.65.65.65.65.		20 - CORRECTIVE MAINTENANCE
	Oti Maintenance in	response to "Maintenanc	e Limit" calibration	warning. Successful recalibration completed after corrective
Comments	maintenance (if any) was	completed.		
	07/18/2014 11:00	07/18/2014 12:59	2.00	08 - NORMAL OPERATION
	UTTIGES IN THE	14743.477777777777		15 - PREVENTIVE MAINTENANCE
	08/04/2014 09:00	08/04/2014 11:59	3.00	08 - NORMAL OPERATION
	00/04/2014 03:00			12 - EXCESS DRIFT ANCILLARY ANALYZER
	08/13/2014 02:00	08/13/2014 02:59	1.00	08 - NORMAL OPERATION
	00/10/2014 02:00			16 - PRIMARY ANALYZER MALFUNCTION
	08/15/2014 08:00	08/15/2014 08:59	1.00	08 - NORMAL OPERATION
	00/10/2011 00:00	5/100728/00/00/00/00/00/00		15 - PREVENTIVE MAINTENANCE
	08/16/2014 06:00	08/16/2014 07:59	2.00	08 - NORMAL OPERATION
	53/10/2011 05:00	35		11 - EXCESS DRIFT PRIMARY ANALYZER
	1			
	08/29/2014 07:00	08/29/2014 07:59	1.00	08 - NORMAL OPERATION
	00/20/20 14 07:00			11 - EXCESS DRIFT PRIMARY ANALYZER
3	08/30/2014 06:00	08/30/2014 11:59	6.00	08 - NORMAL OPERATION
9	00/00/2014 00:00			11 - EXCESS DRIFT PRIMARY ANALYZER
	09/08/2014 06:00	09/08/2014 07:59	2.00	08 - NORMAL OPERATION
9	03/00/2014 00:00			12 - EXCESS DRIFT ANCILLARY ANALYZER
40	09/18/2014 14:00	09/18/2014 15:59	2.00	08 - NORMAL OPERATION
10	03/10/2014 14:00			12 - EXCESS DRIFT ANCILLARY ANALYZER
	09/19/2014 06:00	09/19/2014 08:59	3.00	08 - NORMAL OPERATION
11	03/13/2014 00:00			11 - EXCESS DRIFT PRIMARY ANALYZER
	09/20/2014 08:00	09/20/2014 08:59	1.00	08 - NORMAL OPERATION
12	03/20/2014 00:00			14 - RECALIBRATION
Comment	e: 302014 Linearity Test o	n SO2 and O2 analyzers.		
13	09/24/2014 07:00	09/24/2014 08:59	2.00	08 - NORMAL OPERATION
13	03/24/2014 07:00			12 - EXCESS DRIFT ANCILLARY ANALYZER
14	10/06/2014 06:00	10/06/2014 07:59	2.00	08 - NORMAL OPERATION
14	10/00/2014 00:00	107001207112071		12 - EXCESS DRIFT ANCILLARY ANALYZER
15	10/11/2014 07:00	10/11/2014 08:59	2.00	08 - NORMAL OPERATION
13	10111201401.00	anacemediakanika		12 - EXCESS DRIFT ANCILLARY ANALYZER
16	10/28/2014 06:00	10/28/2014 08:59	3.00	08 - NORMAL OPERATION
10	10/20/2014 00:00			12 - EXCESS DRIFT ANCILLARY ANALYZER
17	10/29/2014 06:00	10/29/2014 08:59	3.00	08 - NORMAL OPERATION
17	1012012014 00.00			12 - EXCESS DRIFT ANCILLARY ANALYZER
18	11/02/2014 06:00	11/02/2014 08:59	3.00	08 - NORMAL OPERATION
10	110212014 00.00			12 - EXCESS DRIFT ANCILLARY ANALYZER
10	12/08/2014 09:00	12/08/2014 09:59	1.00	08 - NORMAL OPERATION
19	12/00/2014 05:50			15 - PREVENTIVE MAINTENANCE
20	12/08/2014 11:00	12/08/2014 11:59	1.00	08 - NORMAL OPERATION
20	12/00/2014 11:00	12.00.2011.11.00		15 - PREVENTIVE MAINTENANCE
04	12/09/2014 06:00	12/09/2014 08:59	3.00	08 - NORMAL OPERATION
21	12/09/2014 00:00	1210012011100.00		11 - EXCESS DRIFT PRIMARY ANALYZER
00	12/11/2014 09:00	12/11/2014 10:59	2.00	08 - NORMAL OPERATION
22	12/11/2014 09:00	12/11/2014 10:00		20 - CORRECTIVE MAINTENANCE
00	12/17/2014 09:00	12/17/2014 09:59	1.00	08 - NORMAL OPERATION
23	12/1//2014 09:00	12/1/12/14/00/03	10.700	14 - RECALIBRATION

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source: SRUSTACK Parameter: SO2PPMC Interval: 001H

Operating	Hours:	4,416.00

Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
4Q2014 Linearity Test on SO2 and O2 analyzers.			- Total Code Bescription
12/20/2014 07:00	12/20/2014 12:59	6.00	08 - NORMAL OPERATION 12 - EXCESS DRIFT ANCILLARY ANALYZER
	Date/Time 4Q2014 Linearity Test of	Date/Time Date/Time 4Q2014 Linearity Test on SQ2 and Q2 analyzers.	Date/Time Date/Time (hours) 4Q2014 Linearity Test on SO2 and O2 analyzers.

Number of Events: 24 Total Duration: 54.00 hours

CMS Performance Summary							
CMS downtime in the reporting period due to:							
Monitor equipment malfunctions	47						
 Non-Monitor equipment malfunctions 	0						
c. Quality assurance calibration	7						
d. Other known causes	0						
e. Unknown causes	0						
2. Total CMS Downtime	54						
3. [Total CMS Downtime] x (100) / [Total source operating time]	1.2%						

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source:

FCCSTACK

Operating Hours:

4,288.38

Parameter:

COPPMC 001H

nterval:	001H	End	Duration	Reason Code - Description
	Start	Date/Time	(hours)	Action Code - Description
cident ID	07/02/2014 07:00	07/02/2014 08:59	2.00	08 - NORMAL OPERATION
	07/02/2014 07:00	01102.20		14 - RECALIBRATION
	- TIO 110011 00:00	07/04/2014 07:59	2.00	08 - NORMAL OPERATION
	07/04/2014 06:00	0770472014 01.55		14 - RECALIBRATION
		07/05/2014 08:59	3.00	08 - NORMAL OPERATION
	07/05/2014 06:00	07/05/2014 08.59		14 - RECALIBRATION
		07/00/0044 07:50	2.00	08 - NORMAL OPERATION
	07/06/2014 06:00	07/06/2014 07:59	2.00	14 - RECALIBRATION
			2.00	08 - NORMAL OPERATION
	07/07/2014 06:00	07/07/2014 07:59	2.00	14 - RECALIBRATION
			3.00	08 - NORMAL OPERATION
	07/08/2014 06:00	07/08/2014 08:59	3.00	14 - RECALIBRATION
			4.00	08 - NORMAL OPERATION
	07/09/2014 10:00	07/09/2014 10:59	1.00	14 - RECALIBRATION
				08 - NORMAL OPERATION
	07/10/2014 06:00	07/10/2014 06:59	1.00	14 - RECALIBRATION
				08 - NORMAL OPERATION
)	07/11/2014 07:00	07/11/2014 08:59	2.00	12 - EXCESS DRIFT ANCILLARY ANALYZER
10	07/16/2014 10:00	07/16/2014 10:59	1.00	08 - NORMAL OPERATION
10	373007			14 - RECALIBRATION
	07/17/2014 07:00	07/17/2014 07:59	1.00	08 - NORMAL OPERATION
11	0//1//2011 01.10			14 - RECALIBRATION
	07/22/2014 13:00	07/22/2014 13:59	1.00	08 - NORMAL OPERATION
12	0772272014 10.00			14 - RECALIBRATION
	07/24/2014 10:00	07/24/2014 10:59	1.00	08 - NORMAL OPERATION
13	0712472014 10.00	01121121		14 - RECALIBRATION
	00/04/0044 08:00	08/04/2014 08:59	1.00	08 - NORMAL OPERATION
14	08/04/2014 08:00	00/04/2014 00:00		14 - RECALIBRATION
		08/06/2014 07:59	1.00	08 - NORMAL OPERATION
15	08/06/2014 07:00	08/08/2014 07:33	1155555	14 - RECALIBRATION
		20/00/0044 00/E0	1.00	08 - NORMAL OPERATION
16	08/09/2014 08:00	08/09/2014 08:59	1.00	14 - RECALIBRATION
			2.00	08 - NORMAL OPERATION
17	08/13/2014 07:00	08/13/2014 08:59	2.00	14 - RECALIBRATION
			4.00	08 - NORMAL OPERATION
18	08/14/2014 14:00	08/14/2014 14:59	1.00	14 - RECALIBRATION
				08 - NORMAL OPERATION
19	08/16/2014 07:00	08/16/2014 09:59	3.00	15 - PREVENTIVE MAINTENANCE
A100 PER SERVICE SERVI				
20	08/18/2014 09:00	08/18/2014 09:59	1.00	08 - NORMAL OPERATION
80.48				14 - RECALIBRATION
21	08/20/2014 08:00	08/20/2014 08:59	1.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
22	08/21/2014 14:00	08/21/2014 14:59	1.00	08 - NORMAL OPERATION
22	2012112			14 - RECALIBRATION
00	08/24/2014 08:00	08/24/2014 08:59	1.00	08 - NORMAL OPERATION
23	00/24/2014 00:00			14 - RECALIBRATION
	08/25/2014 07:00	08/25/2014 08:59	2.00	08 - NORMAL OPERATION
24	00/25/2014 07:00			14 - RECALIBRATION

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Operating Hours:

Source: FCCSTACK Parameter: COPPMC Interval: 001H

44

45

46

47

48

10/22/2014 08:00

10/30/2014 07:00

11/06/2014 09:00

11/12/2014 10:00

11/14/2014 08:00

10/22/2014 08:59

10/30/2014 07:59

11/06/2014 09:59

11/12/2014 10:59

11/14/2014 08:59

4,288.38

08 - NORMAL OPERATION 14 - RECALIBRATION

	Start	End	Duration	Reason Code - Description
Incident ID	Date/Time	Date/Time	(hours)	Action Code - Description
25	08/26/2014 07:00	08/26/2014 07:59	1.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
26	08/27/2014 10:00	08/27/2014 10:59	1.00	08 - NORMAL OPERATION
			17670	14 - RECALIBRATION
27	08/29/2014 08:00	08/29/2014 08:59	1.00	08 - NORMAL OPERATION
			1.00	14 - RECALIBRATION
28	09/01/2014 09:00	09/01/2014 09:59	1.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
29	09/08/2014 07:00	09/08/2014 07:59	1.00	
			1.00	08 - NORMAL OPERATION
30	09/11/2014 09:00	09/11/2014 09:59	1.00	14 - RECALIBRATION
			1.00	08 - NORMAL OPERATION
31	09/13/2014 06:00	09/13/2014 07:59	2.00	14 - RECALIBRATION
		00/10/2014 0/:09	2.00	08 - NORMAL OPERATION
32	09/14/2014 06:00	09/14/2014 08:59	2.00	11 - EXCESS DRIFT PRIMARY ANALYZER
		00/14/2014 00.59	3.00	08 - NORMAL OPERATION
33 09/18/	09/18/2014 09:00	09/18/2014 12:59	4.00	11 - EXCESS DRIFT PRIMARY ANALYZER
				08 - NORMAL OPERATION
Comments:	3Q2014 Linearity Test o	n CO, NOx, SO2, and O2 ar		14 - RECALIBRATION
4	09/19/2014 09:00	09/19/2014 09:59		
	00.00	09/19/2014 09:59	1.00	08 - NORMAL OPERATION
5	09/20/2014 12:00	00/00/004		14 - RECALIBRATION
	03/20/2014 12:00	09/20/2014 12:59	1.00	08 - NORMAL OPERATION
6	09/22/2014 07:00			14 - RECALIBRATION
	09/22/2014 07:00	09/22/2014 07:59	1.00	08 - NORMAL OPERATION
7	00/25/2014 07:00			14 - RECALIBRATION
**	09/25/2014 07:00	09/25/2014 07:59	1.00	08 - NORMAL OPERATION
3	00/20/2014 07 00			14 - RECALIBRATION
	09/26/2014 07:00	09/26/2014 07:59	1.00	08 - NORMAL OPERATION
)	00/00/0044 40 00			14 - RECALIBRATION
	09/26/2014 12:00	09/26/2014 12:59	1.00	08 - NORMAL OPERATION
)	10/04/05			14 - RECALIBRATION
ti.	10/04/2014 06:00	10/04/2014 07:59	2.00	08 - NORMAL OPERATION
				11 - EXCESS DRIFT PRIMARY ANALYZER
	10/08/2014 12:00	10/08/2014 12:59	1.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
	10/16/2014 07:00	10/16/2014 07:59	1.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
	10/20/2014 08:00	10/20/2014 09:59	2.00	

1.00

1.00

1.00

1.00

1.00

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source:

FCCSTACK

COPPMC Parameter:

001H

4,288.38 Operating Hours:

nterval:	O01H Start	End Deta/Time	Duration (hours)	Reason Code - Description Action Code - Description
ncident ID	Date/Time	Date/Time	1.00	08 - NORMAL OPERATION
19	11/18/2014 08:00	11/18/2014 08:59	1.00	14 - RECALIBRATION
		11/21/2014 10:59	1.00	08 - NORMAL OPERATION
0	11/21/2014 10:00	11/21/2014 10.59	1.00	14 - RECALIBRATION
		11/26/2014 13:59	1.00	08 - NORMAL OPERATION
1	11/26/2014 13:00	11/20/2014 13:33	1255T-30	15 - PREVENTIVE MAINTENANCE
52 11/26/2014 15:00	11/26/2014 15:59 1.0	1.00	08 - NORMAL OPERATION	
		25%	15 - PREVENTIVE MAINTENANCE	
	12/07/2014 08:59	1.00	08 - NORMAL OPERATION	
53	12/07/2014 08:00	12/0/12014 00.55	1000 505	14 - RECALIBRATION
12/10/2014 09:00		12/10/2014 09:59	1.00	08 - NORMAL OPERATION
	12/10/2014 00:00		14 - RECALIBRATION	
		12/15/2014 11:59	3.00	08 - NORMAL OPERATION
55 12/15/2014 09:00	12/13/2014 11:00	7897, T	14 - RECALIBRATION	
Commen	ts: 402014 Linearity Test	on CO, NOx, SO2, and O2 a	inalyzers.	
	12/16/2014 09:00	12/16/2014 09:59	1.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
Commer	nts: 4Q2014 Linearity Test	on CO, NOx, SO2, and O2 a	analyzers.	
0011111101			56	

Number of Events:

56

Total Duration:

. CMS downtime in the reporting period due to:	
a. Monitor equipment malfunctions	9
Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	70
d. Other known causes	0
e. Unknown causes	0
2. Total CMS Downtime	79
3. [Total CMS Downtime] x (100) / [Total source operating	1.8%

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source: Parameter: FCCSTACK NOXPPMC

Operating Hours:

4,288.38

Interval: 001H

Incident ID	Start Date/Time	End	Duration	Reason Code - Description
1	07/02/2014 07:00	Date/Time	(hours)	Action Code - Description
	07/02/2014 07:00	07/02/2014 08:59	2.00	08 - NORMAL OPERATION
2	07/04/2044 00:00			14 - RECALIBRATION
2	07/04/2014 06:00	07/04/2014 07:59	2.00	08 - NORMAL OPERATION
3	07/05/0044 00 00			14 - RECALIBRATION
5	07/05/2014 06:00	07/05/2014 08:59	3.00	08 - NORMAL OPERATION
,	07/00/0044			14 - RECALIBRATION
•	07/06/2014 06:00	07/06/2014 07:59	2.00	08 - NORMAL OPERATION
F				14 - RECALIBRATION
5	07/07/2014 06:00	07/07/2014 07:59	2.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
6	07/08/2014 06:00	07/08/2014 08:59	3.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
7	07/11/2014 07:00	07/11/2014 07:59	1.00	08 - NORMAL OPERATION
				12 - EXCESS DRIFT ANCILLARY ANALYZER
3	08/13/2014 06:00	08/13/2014 08:59	3.00	08 - NORMAL OPERATION
				11 - EXCESS DRIFT PRIMARY ANALYZER
9	08/16/2014 08:00	08/16/2014 09:59	2.00	08 - NORMAL OPERATION
		129420000		15 - PREVENTIVE MAINTENANCE
10	08/21/2014 14:00	08/21/2014 14:59	1.00	08 - NORMAL OPERATION
		1	300020	14 - RECALIBRATION
1	09/13/2014 06:00	09/13/2014 07:59	2.00	
		Extremely Considerate Consideration (Consideration Consideration Conside	2.00	08 - NORMAL OPERATION
2	09/14/2014 06:00	09/14/2014 08:59	3.00	11 - EXCESS DRIFT PRIMARY ANALYZER
			5.00	08 - NORMAL OPERATION
3	09/18/2014 09:00	09/18/2014 09:59	1.00	11 - EXCESS DRIFT PRIMARY ANALYZER
		10 10		08 - NORMAL OPERATION
Comments	s: 3Q2014 Linearity Test o	n CO. NOx. SO2 and O2	analyzom	14 - RECALIBRATION
4	09/18/2014 12:00	09/18/2014 12:59	1.00	
	10000	12.00	1.00	08 - NORMAL OPERATION
Comments	s: 3Q2014 Linearity Test of	n CO. NOx SO2 and O2	analyzore	14 - RECALIBRATION
5	10/04/2014 06:00	10/04/2014 07:59		
		01.09	2.00	08 - NORMAL OPERATION
3	10/16/2014 06:00	10/16/2014 07:59	2.00	11 - EXCESS DRIFT PRIMARY ANALYZER
		.5.10/2014 07.59	2.00	08 - NORMAL OPERATION
	10/20/2014 08:00	10/20/2014 08:59	100	11 - EXCESS DRIFT PRIMARY ANALYZER
		10/20/2014 08:59	1.00	08 - NORMAL OPERATION
	11/26/2014 13:00	11/26/2014 42:50		14 - RECALIBRATION
		11/26/2014 13:59	1.00	08 - NORMAL OPERATION
	11/26/2014 15:00	11/20/2011 15 55		20 - CORRECTIVE MAINTENANCE
	11/20/2014 15:00	11/26/2014 15:59	1.00	08 - NORMAL OPERATION
	12/15/2014 09:00	10/15/00 1		14 - RECALIBRATION
	12/15/2014 09:00	12/15/2014 10:59	2.00	08 - NORMAL OPERATION
Commont	40201411- " =			14 - RECALIBRATION
Comments:	4Q2014 Linearity Test on	CO, NOx, SO2, and O2 a	nalyzers.	
	12/16/2014 09:00	12/16/2014 09:59	1.00	08 - NORMAL OPERATION
Community	10001111			14 - RECALIBRATION
comments:	4Q2014 Linearity Test on	CO, NOx. SO2 and O2 at	alyzore	

00

Total Duration:

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source:

FCCSTACK

Parameter:

NOXPPMC

STACK

Interval: 001H

Operating Hours: 4,288.38

interval:	00111		D	Reason Code - Description	
Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Action Code - Description	

CMS downtime in the reporting period due to:	<u> </u>
a. Monitor equipment malfunctions	14
b. Non-Monitor equipment malfunctions	0
c. Quality assurance calibration	24
	0
d. Other known causes	0
e. Unknown causes	38
2. Total CMS Downtime	
3. [Total CMS Downtime] x (100) / [Total source operating	0.9%

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source: FCCSTACK
Parameter: SO2PPMC
Interval: 001H

Operating Hours: 4,288.38

Incident ID	Start Date/Time	End Date/Time	Duration	Reason Code - Description
1	07/02/2014 06:00	Date/Time 07/02/2014 08:59	(hours)	Action Code - Description
	0770272014 00.00	07/02/2014 08:59	3.00	08 - NORMAL OPERATION
2	07/05/2014 07 00			11 - EXCESS DRIFT PRIMARY ANALYZER
2	07/05/2014 07:00	07/05/2014 07:59	1.00	08 - NORMAL OPERATION
2				14 - RECALIBRATION
3	07/06/2014 06:00	07/06/2014 07:59	2.00	08 - NORMAL OPERATION
-				11 - EXCESS DRIFT PRIMARY ANALYZER
4	07/08/2014 06:00	07/08/2014 08:59	3.00	08 - NORMAL OPERATION
5	07/09/2014 10:00	07/09/2014 10:59	1.00	11 - EXCESS DRIFT PRIMARY ANALYZER
			1.00	08 - NORMAL OPERATION
6	07/11/2014 07:00	07/11/2014 08:59		14 - RECALIBRATION
		07/11/2014 08.59	2.00	08 - NORMAL OPERATION
7	07/16/2014 10:00			12 - EXCESS DRIFT ANCILLARY ANALYZER
	07/10/2014 10:00	07/16/2014 10:59	1.00	08 - NORMAL OPERATION
3	071171			14 - RECALIBRATION
•	07/17/2014 06:00	07/17/2014 07:59	2.00	08 - NORMAL OPERATION
				11 - EXCESS DRIFT PRIMARY ANALYZER
9	07/22/2014 13:00	07/22/2014 13:59	1.00	08 - NORMAL OPERATION
		1999 (80) 184820	**************************************	
0	07/24/2014 10:00	07/24/2014 10:59	1.00	14 - RECALIBRATION
	The state of walls were and		1.00	08 - NORMAL OPERATION
1	08/06/2014 06:00	08/06/2014 07:59		14 - RECALIBRATION
		00/00/2014 07:39	2.00	08 - NORMAL OPERATION
2	08/16/2014 06:00	08/16/2014 00:50		11 - EXCESS DRIFT PRIMARY ANALYZER
	33/13/2014 00,00	08/16/2014 09:59	4.00	08 - NORMAL OPERATION
3	08/24/2014 06:00			11 - EXCESS DRIFT PRIMARY ANALYZER
T-1	08/24/2014 06:00	08/24/2014 08:59	3.00	08 - NORMAL OPERATION
4				11 - EXCESS DRIFT PRIMARY ANALYZER
•	09/08/2014 06:00	09/08/2014 07:59	2.00	08 - NORMAL OPERATION
5	09/11/2014 06:00	09/11/2014 09:59	4.00	11 - EXCESS DRIFT PRIMARY ANALYZER
			21.00	08 - NORMAL OPERATION
3	09/13/2014 06:00	09/13/2014 07:59	2.00	11 - EXCESS DRIFT PRIMARY ANALYZER
			2.00	08 - NORMAL OPERATION
	09/14/2014 06:00	09/14/2014 00:50		11 - EXCESS DRIFT PRIMARY ANALYZER
	14 00.00	09/14/2014 08:59	3.00	08 - NORMAL OPERATION
	09/18/2014 09:00	00/40/0044		11 - EXCESS DRIFT PRIMARY ANALYZER
	33/10/2014 09:00	09/18/2014 09:59	1.00	08 - NORMAL OPERATION
Commente	202014 Line - 11 T			14 - RECALIBRATION
Comments:	2014 Linearity Test on	CO, NOx, SO2, and O2 an	alyzers.	
	09/18/2014 12:00	09/18/2014 12:59	1.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
Comments:	3Q2014 Linearity Test on	CO, NOx, SO2, and O2 and	alyzers.	
	09/22/2014 07:00	09/22/2014 07:59	1.00	OR NORMAL OPERATION
		recolars the state of the state	1.00	08 - NORMAL OPERATION
	10/04/2014 06:00	10/04/2014 07:59	2.00	14 - RECALIBRATION
			2.00	08 - NORMAL OPERATION
	10/16/2014 06:00	10/16/2014 27 75		11 - EXCESS DRIFT PRIMARY ANALYZER
	. 57 10720 14 00.00	10/16/2014 07:59	2.00	08 - NORMAL OPERATION
	10/20/2044 22 22			11 - EXCESS DRIFT PRIMARY ANALYZER
	10/20/2014 06:00	10/20/2014 09:59	4.00	08 - NORMAL OPERATION
	1	112		11 - EXCESS DRIFT PRIMARY ANALYZER

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source:

FCCSTACK

4,288.38 Operating Hours:

	01-4
Interval:	001H
Parameter:	SO2PPMC
3041001	

nterval:	O01H Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
ncident ID 24	10/30/2014 06:00	10/30/2014 07:59	2.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
25	11/12/2014 06:00	11/12/2014 10:59	5.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
26	11/18/2014 06:00	11/18/2014 08:59	3.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
27	11/21/2014 06:00	11/21/2014 10:59	5.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
28	11/26/2014 15:00	11/26/2014 15:59	1.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
29	12/01/2014 06:00	12/01/2014 08:59	3.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
30	12/07/2014 06:00	12/07/2014 08:59	3.00	08 - NORMAL OPERATION 11 - EXCESS DRIFT PRIMARY ANALYZER
31	12/15/2014 09:00	12/15/2014 10:59	2.00	08 - NORMAL OPERATION 14 - RECALIBRATION
Comment	s: 4Q2014 Linearity Test	on CO, NOx, SO2, and O2	analyzers.	08 - NORMAL OPERATION
32	12/16/2014 09:00	12/16/2014 09:59	1.00	14 - RECALIBRATION

Number of Events:

32

Total Duration:

. CMS downtime in the reporting period due to:	62
Monitor equipment malfunctions	0
Non-Monitor equipment malfunctions	11
c. Quality assurance calibration	0
d. Other known causes e. Unknown causes	0
2 Total CMS Downtime	73
3. [Total CMS Downtime] x (100) / [Total source operating time]	1.7%

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source: N_H2S Parameter: N_H2S Interval: 001H

Operating Hours: 4,416.00

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
1	07/22/2014 06:00	07/22/2014 07:59	2.00	08 - NORMAL OPERATION
				11 - EXCESS DRIFT PRIMARY ANALYZER
2	08/05/2014 06:00	08/05/2014 07:59	2.00	08 - NORMAL OPERATION
				11 - EXCESS DRIFT PRIMARY ANALYZER
•	08/09/2014 06:00	08/09/2014 08:59	3.00	08 - NORMAL OPERATION
	00/00/00/			11 - EXCESS DRIFT PRIMARY ANALYZER
•	09/08/2014 12:00	09/08/2014 12:59	1.00	08 - NORMAL OPERATION
Commonte	2000111: " =			14 - RECALIBRATION
Comments	3Q2014 Linearity Test o	n H2S analyzer.		
	12/05/2014 13:00	12/05/2014 13:59	1.00	08 - NORMAL OPERATION
Comments:	4Q2014 Linearity Test or	n H2S analyzer		14 - RECALIBRATION
	, , , , , , ,			
		Number of Events:	5	

Total Duration:

0 2 0 0
2
2
1000
0
7

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source:

S_H2S

Parameter: S_I

S_H2S 001H Operating Hours:

4,416.00

terval:	001H	End	Duration	Reason Code - Description
	Start	Date/Time	(hours)	Action Code - Description
ncident ID	Date/Time	07/01/2014 07:59	1.00	08 - NORMAL OPERATION
	07/01/2014 07:00	07/01/2014 07:00		11 - EXCESS DRIFT PRIMARY ANALYZER
		07/04/2014 07:59	1.00	08 - NORMAL OPERATION
	07/04/2014 07:00	07/04/2014 07:38		11 - EXCESS DRIFT PRIMARY ANALYZER
		07/08/2014 07:59	2.00	08 - NORMAL OPERATION
	07/08/2014 06:00	07/06/2014 07:00		11 - EXCESS DRIFT PRIMARY ANALYZER
		07/09/2014 07:59	1.00	08 - NORMAL OPERATION
	07/09/2014 07:00	07/09/2014 07:55		11 - EXCESS DRIFT PRIMARY ANALYZER
		07/10/2014 10:59	5.00	08 - NORMAL OPERATION
,	07/10/2014 06:00	07/10/2014 10:55		11 - EXCESS DRIFT PRIMARY ANALYZER
		07/15/2014 07:59	1.00	08 - NORMAL OPERATION
3	07/15/2014 07:00	07/15/2014 07:55		11 - EXCESS DRIFT PRIMARY ANALYZER
		07/25/2014 07:59	1.00	08 - NORMAL OPERATION
7	07/25/2014 07:00	0772572014 07.55		11 - EXCESS DRIFT PRIMARY ANALYZER
		08/05/2014 08:59	2.00	08 - NORMAL OPERATION
8	08/05/2014 07:00	08/03/2014 00:00		11 - EXCESS DRIFT PRIMARY ANALYZER
		08/06/2014 08:59	2.00	08 - NORMAL OPERATION
9	08/06/2014 07:00	08/00/2014 00:00		11 - EXCESS DRIFT PRIMARY ANALYZER
	2011410014 07:00	08/11/2014 07:59	1.00	08 - NORMAL OPERATION
10	08/11/2014 07:00	00/11/2014 01:00		11 - EXCESS DRIFT PRIMARY ANALYZER
	08/23/2014 07:00	08/23/2014 13:59	7.00	08 - NORMAL OPERATION
11	08/23/2014 07:00	COLLORED		11 - EXCESS DRIFT PRIMARY ANALYZER
	08/27/2014 07:00	08/27/2014 08:59	2.00	08 - NORMAL OPERATION
12	08/2/12014 07.00	J3/2//2011		11 - EXCESS DRIFT PRIMARY ANALYZER
	09/08/2014 08:00	09/08/2014 08:59	1.00	08 - NORMAL OPERATION
13	09/08/2014 08:00	50/00/2011		14 - RECALIBRATION
0	ents: 3Q2014 Linearity Test	on H2S analyzer.		
	12/10/2014 09:00	12/10/2014 09:59	1.00	08 - NORMAL OPERATION
14	12/10/2014 09:00			14 - RECALIBRATION

Number of Events:

Total Duration:

CMS downtime in the reporting period due to:	
a. Monitor equipment malfunctions	26
b. Non-Monitor equipment malfunctions	0
	2
c. Quality assurance calibration	0
d. Other known causes	0
e. Unknown causes	28
2. Total CMS Downtime	20
3. [Total CMS Downtime] x (100) / [Total source operating	0.63%

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source: FLARE Parameter: H2SCONC

Operating Hours: 4,416.00

Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description
1	07/14/2014 11:00	07/14/2014 14:59	4.00	08 - NORMAL OPERATION
				11 - EXCESS DRIFT PRIMARY ANALYZER
2	09/04/2014 06:00	09/04/2014 07:59	2.00	08 - NORMAL OPERATION
2				11 - EXCESS DRIFT PRIMARY ANALYZER
3	09/19/2014 11:00	09/19/2014 11:59	1.00	08 - NORMAL OPERATION
Commonto	20204411			14 - RECALIBRATION
Comments	3Q2014 Linearity Test o	n H2S analyzer.		
1	11/04/2014 16:00	11/05/2014 03:59	12.00	08 - NORMAL OPERATION
				14 - RECALIBRATION
•	11/05/2014 06:00	11/05/2014 10:59	5.00	08 - NORMAL OPERATION
,				11 - EXCESS DRIFT PRIMARY ANALYZER
)	12/11/2014 16:00	12/11/2014 17:59	2.00	08 - NORMAL OPERATION
		VALUE OF THE PARTY		14 - RECALIBRATION
Comments:	4Q2014 Linearity Test of	n H2S analyzer		

Number of Events:

6

Total Duration:

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source:

FLARE H2SCONC Operating Hours: 4,416.00

Parameter:

001H

Intonuals	001H				
Interval:	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description Action Code - Description	igi arri

CMS Performance Summary (a)

CMS downtime in the reporting period due to:	11
a. Monitor equipment malfunctions	0
Non-Monitor equipment malfunctions	15
c. Quality assurance calibration	0
d. Other known causes e. Unknown causes	0
2 Total CMS Downtime	26
[Total CMS Downtime] x (100) / [Total source operating time]	0.6%

⁽a) Downtime occurring prior to CEMS certification not included in Performance Summary.

Downtime Events - Duration

Plant: MONROE ENERGY, LLC.

Report Period: 07/01/2014 00:00 Through 12/31/2014 23:59

Time Online Criteria: 1 minute(s)

Source: SRUFLARE Parameter: H2SCONC

Operating Hours: 4,416.00

Interval: 001H

Incident ID	Start Date/Time	End Date/Time	Duration (hours)	Reason Code - Description
1	07/07/2014 19:00	07/08/2014 03:59	9.00	Action Code - Description 08 - NORMAL OPERATION
				16 - PRIMARY ANALYZER MALFUNCTION
2	07/08/2014 05:00	07/08/2014 18:59	14.00	08 - NORMAL OPERATION
2				11 - EXCESS DRIFT PRIMARY ANALYZER
3	08/27/2014 18:00	08/29/2014 04:59	35.00	08 - NORMAL OPERATION
1	09/20/2044 00 ==			16 - PRIMARY ANALYZER MALFUNCTION
	08/29/2014 06:00	08/30/2014 06:59	25.00	08 - NORMAL OPERATION
;	09/09/2014 06:00	00/00/004		11 - EXCESS DRIFT PRIMARY ANALYZER
	00,00,2014 00,00	09/09/2014 11:59	6.00	08 - NORMAL OPERATION
	09/29/2014 06:00	00/20/2044 00.50		11 - EXCESS DRIFT PRIMARY ANALYZER
-		09/29/2014 08:59	3.00	08 - NORMAL OPERATION
	12/08/2014 09:00	12/08/2014 09:59		11 - EXCESS DRIFT PRIMARY ANALYZER
		12/00/2014 09:59	1.00	08 - NORMAL OPERATION
	12/08/2014 11:00	12/08/2014 11:59		16 - PRIMARY ANALYZER MALFUNCTION
		12/00/2014 11:59	1.00	08 - NORMAL OPERATION
	12/30/2014 07:00	12/30/2014 18:59		16 - PRIMARY ANALYZER MALFUNCTION
		12/30/2014 18:59	12.00	08 - NORMAL OPERATION
		Number of Events:		11 - EXCESS DRIFT PRIMARY ANALYZER

Total Duration: 106.00 hours

CMS Performance Summary (a)

3. [Total CMS Downtime] x (100) / [Total source operating ime]	2.4%
	106
2. Total CMS Downtime	0
e. Unknown causes	0
d. Other known causes	0
c. Quality assurance calibration	0
b. Non-Monitor equipment malfunctions	
a. Monitor equipment malfunctions	106

⁽a) Downtime occurring prior to CEMS certification not included in Performance Summary.

Attachment A

- Environmental Incident Reports None
- Excess Emission Report Form for Sources with Continuous Emission Monitoring

Attachment 5 Excess Emissions Summary for 3rd Quarter 2013

Monroe Energy, LLC – Trainer Refinery Semianual Reporting Period Excess Emission Summary Reporting Period: July 01, 2014 - December 31, 2014

Source (hrs) Claus Sulfur Recovery Plant (SRU) 4,416.00 Source ID 102 0,416.00 Source EM002 Source EM002 Source Details of the Class System Source Details of the Class System	Pollutant		The second secon			Exc	Excess Emissions	
	İ	Cimit	Units	Averaging	Average Type	Duration	Percentage of Operating	Comments
	SO2	250	O %U @ pxmaa	2		(e)	(%)	
			2000	Inoni-71	Rolling	0.00	%00.0	
	H ₂ S	162	ppmvd @ 0% 02	3-hour	Rolling	4.00	%60.0	
	H ₂ S	162	ppmvd @ 0% 02	3-hour	Rolling	00.00	0.00%	
		200	ppmvd @ 0% O ₂	3-hour	Rolling	0.00	%00 0	
	×ON	155.3	ppmvd @ 0% O ₂	7-day	Rolling	0.00	%00.0	This limit applies at all times when the FCCU and/or CO boiler are operating, except during periods of startup, shirtdown or matrixed as
		121.1	ppmvd @ 0% O ₂	365-day	Rolling	000	70000	This limit applies at all times when the ECC11 and/or CO
		654.5	reavisant	40 month	, (0.00.0	boiler are operating.
FCCU Unit		003	mol format	111101111-71	Manua Sum	00.00	%00.0	
[Source ID 101] 4,288.38	00	2000	ppmva @ 0% O ₂	1-hour	Block	0.00	0.00%	
	t	404.1	tons/year	12-month	Rolling Sum	0.00	%00.0	
	0	90	ppmvd @ 0% 0 ₂	7-day	Rolling	0.00	%00.0	
	202	25	ppmvd @ 0% 0 ₂	365-day	Rolling	0.00	%00.0	
	1	165.8	tons/year	12-month	Rolling Sum	0.00	%00.0	
ŏ	Opacity	0.08	L/G Ratio Unitless	1-hour	Block	0.00		The refinery monitors opacity in accordance with an approved Alternate Monitoring Plan which requires the
e.	1							refinery to monitor the liquid-to-gas ratio (L/G) of the FCC wet gas scribbar
121] 4,416.00	Z ₂ Q	162	ppmvd @ 0% 02	3-hour	Rolling	000	2000	
Main Flare Source ID 103] 4,416,00	SO ₂	500	lb/day	24-hr	e cillod	00.0	%00.0	